

AFSC Priorities and Annual Guidance for FY2016

Purpose:

The Alaska Fisheries Science Center's current Science Plan (AFSC 2009) defines our vision, goals and objectives. The purpose of this Guidance Memo is to focus the AFSC on the coming year's programmatic priorities through our FY16 Implementation Process by balancing the Center's mandates and stakeholder priorities with the fiscal outlook. In addition, this guidance will help position the Center for out year (2-5 year) challenges and opportunities.

FY15 in Review:

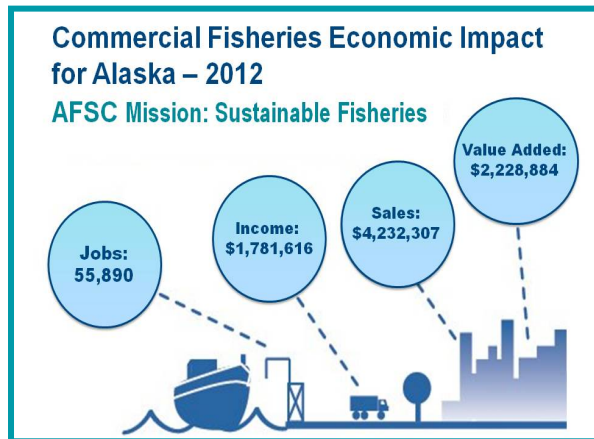
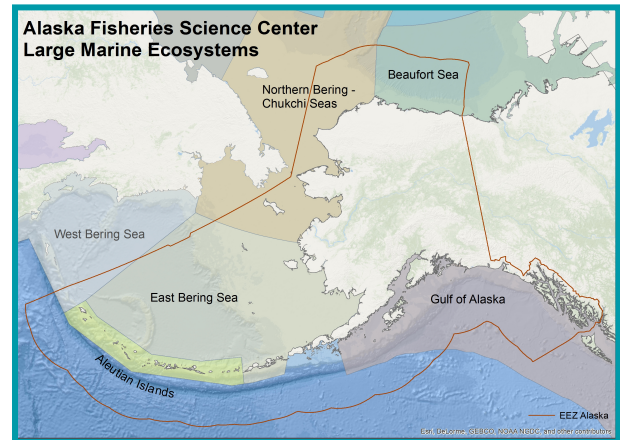
Despite these challenges, the AFSC will accomplish the following in FY15, and much more:

- Complete full groundfish and crab stock assessment surveys in the Bering Sea and Gulf of Alaska;
- Conduct surveys for key marine mammal stocks in Alaska, including Steller sea lions, northern fur seals, Cook Inlet beluga whales, and Arctic ice seals and cetaceans;
- Complete key process studies in four Large Marine Ecosystems: the Gulf of Alaska, East and West Bering Seas, and the Chukchi Sea;
- Produce a full suite of groundfish and shellfish stock assessments for the North Pacific Fishery Management Council (NPFMC);
- Produce a full suite of marine mammal stock assessments for Alaska, as well as for some marine mammal stocks that occur along the US West Coast;
- Complete the third year of the restructured, partial-coverage observer program to collect fishery-dependent data on previously unobserved fleets;
- Collaborate with commercial fishers and private industry to further the national priority of utilizing electronic monitoring technologies as an alternative means to collect fishery-dependent data and to supplement observer coverage;
- Collaborate with commercial fishers and industry to address ways to reduce bycatch of Pacific halibut;
- Conduct cooperative research to ground truth models that predict the presence and abundance of coral habitat inside and outside canyon areas in the eastern Bering Sea;
- Successfully deploy and retrieve trawl-resistant bottom mounted echo-sounders in Shelikof Strait to better determine the spawn time and the size of that Pollock stock;
- Develop and plan and implementation process in response to the Executive Order to Expand Public Access to Research Results (PARR);
- Complete the genetic stock identification of salmon bycatch from the Bering Sea and Gulf of Alaska;
- Complete two reviews by the Center for Independent Experts focusing on (1) our Recruitment Processes Research and (2) General Modeling for Alaskan Crab Stocks;
- Investigate the effects of the El Niño-Southern Oscillation warm phase and West Coast pinniped populations on the Channel Islands;
- Conduct economic surveys of several commercial groundfish and crab fisheries, and of Alaska saltwater angler charter businesses.

AFSC Mission and Challenges:

As we look to the future, I thought it would be first helpful to review the scope of the AFSC mission and some of the budget challenges we have and will be facing.

Geographical Challenges: The coastal oceans of Alaska under the AFSC's research umbrella cover 66 percent of the U.S. Continental Shelf; 7 of the 11 Large Marine Ecosystems in U.S. waters¹; and total nearly 3 million square miles in the Gulf of Alaska, Bering Sea, Aleutian Islands, and the Arctic Ocean.



Economic Impact: Alaskan waters – and research conducted by the AFSC – support some of the most important commercial fisheries in the world. Alaska accounts for approximately half of the nation's fish catch by weight. The commercial catch in Alaska exceeds 2M metric tons with a value of over \$2B after initial processing. This economic benefit is spread across Alaska and the entire west coast of the U.S. In addition, oil and gas development and production in Alaska is a key contributor to the U.S. goal of becoming energy independent.

Fishery Stock Assessments: Alaska is unique across the U.S. and elsewhere in that there are no fish or shellfish stocks subject to overfishing, and only one stock is in an "overfished" status. This remarkable achievement is possible because of a combination of hard work and scientific excellence, where AFSC research addresses more than 250 fish and shellfish stocks and 41 marine mammal stocks distributed across 591,000 square miles of the U.S. continental shelf and adjacent pelagic waters. In 2015, the AFSC will conduct 55 groundfish and crab stock assessments, 32 of which are part of the fish stock sustainability index (FSSI), out of a nationwide total of 199 FSSI stocks.

Fishery-Dependent and Independent Data Collection For the 2014 fishing year, staff conducted 104 training classes, ranging from 3-week trainings for new observers to 1-day briefings for returning observers. The AFSC deployed 436 observers, for a total of 44,178 days at sea and at processing facilities in the Bering Sea and Gulf of Alaska groundfish fisheries. These observers collected data on board 367 fixed gear and trawl vessels and at 14 processing facilities. This represents about half the total observer effort nation-wide collecting critical fishery-dependent data enabling stock assessment and fishery management.

¹ AFSC research is routinely conducted in the following 6 LMEs: East Bering Sea, Gulf of Alaska, Aleutian Islands, Northern Bering-Chukchi Seas, Beaufort Sea, and the California Current. The AFSC also occasionally conducts research in a seventh LME, the West Bering Sea LME. (<http://www.lme.noaa.gov/>)

In 2014 AFSC scientists, contractors, and colleagues and partners spent over 4,200 person days at sea conducting resource surveys for Alaska fish and crab stock assessments and important ecosystem research.

Marine Mammal Stock Assessment: In 2014, the AFSC continued to monitor marine mammal trends in abundance for key stocks, including Steller sea lions, northern fur seals, Cook Inlet beluga whales, bowhead whales, and California sea lions. Such efforts are needed to understand and mitigate, as possible, the impacts of anthropogenic activities (e.g., commercial fishing, oil and gas development and production) and climate change. In addition, Alaska is unique in the US in that Alaska Native subsistence hunters are allowed under the Marine Mammal Protection Act and Endangered Species Act to harvest marine mammals for subsistence purposes. Native communities are dependent on these resources for food and materials, as well as income derived from the sale of handicrafts made from marine mammal skins, bone, and teeth. Research conducted by the AFSC is critical to providing for sustainable usage of marine mammals by the subsistence community in Alaska.

FY2016 Budget Outlook

The FY16 President's Budget Request for NOAA recognizes the importance of science-based stewardship of living marine resources and the need for information to support sound decision-making for human, ecological, and economic health. The budget request provides support and improvements to our network of observations, forecasts, and assessments – information termed “environmental intelligence” – that is the core of our mission. For NOAA Fisheries, and specifically NOAA Fisheries in Alaska, the FY16 Budget Request includes increased funding to:

- Expand programs to strengthen consultation and permitting capacity required to meet mandates of the Endangered Species Act, Marine Mammal Protection Act, and Magnuson-Stevens Act;
- Support the development, testing, and installation of electronic monitoring and reporting technologies for fishery-dependent data collections;
- Implement a distributed biological observatory (DBO) to detect climate and human-induced change on Arctic ecosystems; and
- Modernize the stock assessment program and support implementation of a “next generation stock assessment” framework – including developing advanced sampling technologies to fill data collection gaps and improve assessment methods and decision tools.

Also in the FY2016 Budget Request, NOAA Fisheries proposed to restructure its Programs, Projects and Activities (PPAs) to reduce the total number of budget lines in the appropriation. The result of this change could provide NOAA Fisheries more flexibility and transparency for mandates and mission activities that are currently supported by several PPAs.

The FY2016 President's Budget Request is only the first step in a long appropriations process. At the AFSC we will review a series of planning scenarios, which will include the President's Request, the budget mark-ups from the Senate and House, and a “flat-funding” scenario at FY15 spending levels.

FY16 Priorities: Research, Collaboration, Partnerships, and Outreach

Our general priorities at the AFSC are to maintain support for two core research foci, namely: (1) maintain the information and capabilities needed to support the assessments required for the federal management of fish, shellfish, and marine mammal stocks; and (2) provide ecological and socioeconomic information to the NPFMC and Alaska Regional Office (AKR) to inform and evaluate management decisions and support quota monitoring and analyses required by legal and regulatory processes.

The AFSC's core research foci are consistent with the core priorities of NOAA Fisheries. In addition, the agency has identified programmatic areas of priority for FY16, which include: (1) implementing programs to address Illegal, Unreported, and Unregulated fishing (IUU); (2) enhancing support for Electronic Monitoring and Electronic Reporting (EM/ER) in commercial fisheries; (3) expanding NOAA's role in supporting aquaculture to address the nation's future seafood supply; (4) enhancing the conservation value of actions taken by NOAA Fisheries by provided greater focus on key species (e.g. Species in the Spotlight); (5) identifying next steps with regard to ecosystem-based management; and (6) developing measures to be taken by NOAA Fisheries in support of recreational fisheries.

To further our continued focus on core assessments, we must prepare for the future. To do so, we will better align ecosystem process studies with stock assessments. Specifically, in FY16 and for the next few years, the AFSC is responsible for developing a Regional Action Plan (RAP) that describes the research needed to address the vulnerability of commercial fisheries to climate change in Alaska. In FY16, the AFSC has agreed to develop a RAP for the Eastern Bering Sea Large Marine Ecosystem. Additionally, we will emphasize improvement of our science programs by continuing efforts to incorporate environmental effects into selected stock assessments and providing improved observational methods through the use of advanced sampling technologies.

Public Access to Research Results

In FY16, the AFSC will be focused on responding to requirements from the White House Office of Science and Technology Policy to provide increased Public Access to Research Results (PARR). The goal of the PARR Policy is to allow the public to access publications and digital environmental data produced by federal researchers or by recipients of federal funds. In the near future, more aspects of data management – including making our data and data products available and accessible – will be routine components of planning and conducting our research.

FY2016 Funding Priorities

Funding priorities in FY16 were determined after consultation with NOAA Fisheries Headquarters and the Alaska Regional Office. Funding priorities for the AFSC in FY16 include: (1) continued success of the observer program and progress with electronic monitoring capabilities; (2) sustained stock assessments of groundfish (including maintaining the longline and trawl surveys), shellfish, and protected species; (3) research on process studies related to linking recruitment of commercially important species to environmental change, including climate change, (4) research on the western population of Steller sea lions and Cook Inlet beluga whales; (5) high-Arctic research on marine mammals, fish, and shellfish; (6) 20-year

"Nowhere is the challenge of simultaneously using and protecting marine ecosystems so starkly revealed as in the relatively pristine but fast-changing Arctic." – Dr. Richard Merrick, Director, Scientific Programs and Chief Science Advisor for NOAA Fisheries

climate forecasts for commercially-important fish and shellfish populations, including the development of a Regional Action Plan to address species vulnerability to climate change; (7) research in response to the FY13, FY14, and FY15 Program Reviews; and (8) fulfilling our commitments to the Bureau of Ocean and Energy Management (in support of NOAA permit reviews of oil and gas explorations and development) and the North Pacific Research Board.

Collaborations and Partnerships

Collaboration will continue to be strongly encouraged wherever possible, connecting areas of strength across Divisions to increase success in: securing external funds; communication with stakeholders; interdisciplinary, modeling, and synthesis components of research activities; and overall research impact. Examples of research areas naturally disposed to cross-Divisional collaborations include Arctic activities; research on populations listed under the Endangered Species Act and depleted populations of pinnipeds; fishery oceanographic and habitat research leading to improved stock assessments; research to improve electronic monitoring technologies, ecosystem modeling, and research directed at enhancing aquaculture practices in Alaska. The Activity Plan assessment criteria will be revised in FY16 to elevate scores for research activities exhibiting significant cross-divisional collaborations.

Partnerships and cooperative research will continue to be a mission priority at the AFSC. Following the FY14 NOAA Fisheries guidance to focus on the core NOAA Fisheries mandates, the AFSC is committed to following three overarching principles regarding support for cooperative research: (1) focusing limited resources to maximize national benefits; (2) working closely with our State and Tribal partners, as well as stakeholders in the industry and environmental community; and (3) making strategic choices consistent with the AFSC Science Plan.

Alignment of Research Activities and Workforce Capabilities

As noted, under the President's FY16 budget, we expect nearly level funding to continue with a few targeted increases for specific research activities such as electronic monitoring and next generation stock assessment. However, we must also be prepared to respond to budget cuts on the order of 5-10% in FY16 overall or at least in some PPAs, depending on the final budget allocations. In this environment, we will continue to use the following strategies to align our workforce capabilities and research activities:

- Use of non-competitive reassignments where possible to fill labor shortfalls. Although some future workforce needs will require applicants external to the AFSC, non-competitive reassignments will be used when possible, as a way to contain labor costs while aligning workforce capabilities to mission needs.
- Utilize the current AFSC Science and Implementation planning process to provide incentives for this workforce realignment through feedback on the relevancy of AFSC research activities to AFSC priorities and through connecting management support and access to temporary funding, temporary allocation of ship time, and other research capabilities to AFSC priority research.
- Develop Divisional organizational and workforce changes needed by FY17 that are responsive to the assumption of sustained level budget funding and a level labor cost ceiling.
- Continue progress in process research integration through cross-Divisional staff integration in Recruitment Process Alliance prioritized research activities.